

## **Fish Management 2009**

**Please answer the following Question:**

- 1- Enumerate diseases of fishes that transmitted orally via ingestion of unpasteurized fish offals and described fully one of them.**
- 2- Describe the differential diagnosis of the causative agents which cause the following disease sign:**
  - a- Partial or complete sloughing of gills.
  - b- Spiral swimming of fish in water.
  - c- hemorrhagic patches over fish skin.
  - d- White creamy nodules in internal organs.
- 3- One of the most serious problem affect fish production is hatcheries disease comment on one disease that affect broadstock and fries (causative agent, disease signs and your judgment).**
- 4- In which Fish diseases we can apply the following:**
  - a- Summer drying system.
  - b- Formalin at a dose of 10 mg/L.
  - c- Furnace.
  - d- Mg. sulphates.
  - e- Increase the water currency.
  - f- Organic phosphorus compounds.
  - g- Try to remove the real cause of skin damage.

## **Fish Management 2011**

**I- Describe the laboratory differential diagnosis of the following diseases:**

a. Hemorrhagic septicemia in fresh-water fish.

b. Mycobacteriosis of fish.

**II- Mention the economic importance, of anchor worm infestation.**

**III- one of the most serious problems affect fish production is respiratory manifestations describe the possible causes that responsible for such and how to differentiate between them in laboratory.**

**IV- How could you deal with the following diseases with full description of dose, route of application and duration of the used drug?**

a- Hexamitiasis in salmonids.

b- Peduncle disease in cold water fish.

c- Cotton wool disease in broad stock and eggs.

d- Gill flukes.

## Fish Management 2012

- 1) Enumerate fish diseases mainly affecting gills with full description of one parasitic disease affecting fish gills diagnosed by detection of adult female parasite on gill scrapping.
- 2) Rewrite the following sentences and correct the wrong word(s) if present:
  - 1- Marbling appearance of the affected gills is a characteristic sign of sand paper disease.
  - 2- Infectious Hematopoietic Necrosis is primary disease of carp species and caused by herpes virus.
  - 3- Eye cataract is a parasitic disease caused by Ichthyophonus hoferi.
  - 4- Nocardiosis is a chronic granulomatous disease affecting mainly cold water fish.
  - 5- Dactylogyrus vasator is a viviparous worm containing 8 pairs of marginal hooks and mainly found on fish gills.
  - 6- Tomites are the infecting stages of black tail disease.
  - 7- Saprolegniasis is a mycotic disease infecting fish eggs through vertical transmission.
  - 8- Enteric red mouth disease is a viral disease of tilapia species caused by Rhabdovirus.
  - 9- Virulence of Aeromonas hydrophila is mainly due to presence of a layer in the bacterial cell wall and fish mainly die due to hypoglycemic shock.
  - 10- Leech infestation in fish pond could act as a mechanical transmitter to trypanosomiasis.

3) Enumerate specific salmonide diseases with full description and treatment of one of them can be transmitted vertically and characterized by its chronic nature and presence of white creamy nodules on the kidney.

4) In which fish diseases we can apply the following treatment:

1- Furance in dose of 1.5mg/L for one hour.

2- Furazolidone in a dose of 35mg/Kg fish body weight per day for 20 days.

3- Summer drying system and using calcium oxide (hydrated lime) to create alkaline media.

4- Magnesium sulphate in a dose of 0.2-0.3% of the diet for 3 days.

5- Erythromycin phosphate in a dose of 190.220mg per kg of fish per day for 21 days to control mortality and in dose of 1mg/L in water to destroy the organism within the egg.

## Fish Management 2013

### A. Enumerate fish disease that

1. Characterized by hemorrhagic patches on skin
2. Transmitted vertically.
3. Easily diagnosed by naked eye.
4. Could not be treated

### B. Mention the disease name and the causative agent in the following cases

1. Disease diagnosed by presence of adult female parasite with anchor embedded in the fish skin, fins and fish mainly die due to peritonitis
  2. Disease caused by motile bacteria that possess a surface layer (S layer) which considered a virulence marker to that bacterium
  3. Disease with opalescent mucus plug characteristically found in the fish intestine and the alimentary tract always free of food or faeces.
  4. Disease in which we find both male and female free living, on skin and mounds of fish making severe irritation to skin and linear hemorrhage the skin.
  5. Examination of gill scraping from infected fish under the microscope the adult worm with seven pairs of marginal hooks and usually a pair of median hooks on the opisthorch.
  6. Presence of white to gray-white abscesses in kidney and the bacteria present intracellular.
  7. Disease with abscesses develop in the muscles of catfish, especially along the sides and caudal peduncle abscesses may increase in size into large cavities filled with foul-smelling gas.
  8. Disease biologically transmitted by fish leech
- ### C. Discuss in details the etiology and treatments of the following and support your answer with illustration if possible
1. Gill and skin fluke
  2. Marine and fresh water Ich
  3. Spironucleosis and Costiosis
  4. Mycobacteriosis and Bacterial kidney diseases.
  5. Lymphocystic and Ichthyophonus

## **Fish Management 2014**

**A. Describe briefly the causative agent and clinical signs of the following**

### **fish diseases**

1. Whirling disease.
2. Motile Aeromonas Septicemia.
3. Saddle- back disease.
4. Gill rot (Branchio mycosis)

**B. Discuss the field and laboratory diagnosis of the following**

1. Gill fluke (Dactylogyrus).
2. White-spot disease in fish
3. Vibriosis in Eels.
4. Trypanosoma as blood parasite

**C. How can you deal with the following aquaculture disease problems (**

### **treatment and control if possible**

1. Frunculosis in Salmonids.
2. Anchor worm infestation (Ierniosis)
3. Cotton-wool disease (Saprolegniasis) in fertilized eggs and adult fish.
4. Infectious pancreatic necrosis viral disease (IPN).

## Fish Management 2015

Please illustrate with diagram only the causative agent of the following diseases and mention the most important clinical signs

- |                            |                          |
|----------------------------|--------------------------|
| 1. Anchor worm infestation | 6. Blue slime disease    |
| 2. Black tail disease      | 7. Fish lice             |
| 3. Gill flukes             | 8. Saddle back disease   |
| 4. White spot disease      | 9. Epistyles infestation |
| 5. Hexamita infestation    |                          |

Enumerate the causative agent and treatment of each of the following diseases

1. Red best of Eel
2. Dee Disease
3. Parasitic eye cataract
4. Columnaris

Tabulate the main points of differential diagnosis between the following

1. Lymphocystis and Yerseniosis
2. Frunculosis and Sandpaper disease
3. Black spot disease and Yellow grub disease
4. IPN and IHN

Write full description on the role of each of the following on the development of disease

(8 marks)

1. Secondary zoospores of *Saprolegnia parasitica* in tilapia farms.
2. Aged spore of *Myxosoma cerebralis* in Salmon farms.
3. Toxins produced by *Aeromonas hydrophila* infection.
4. Syncytium of *Brachiomyces Sanguinus* in common carp